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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/137,393	08/20/98	DEWANJEE	F DSCK-525-C3

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IM22/1016

EXAMINER

SERGEANT, R

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 10/16/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/137,393

Applicant(s)
Dewanjee et al.

Examiner
Rabon Sergent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 26, 2000
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-33 and 36-47 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-33 and 36-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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1. Claims 40, 41, and 44-47 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the production of golf ball covers using polyoxytetramethylene polyol, does not reasonably provide enablement for the production of golf ball covers using virtually any polyol. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Applicants have failed to provide adequate enablement for the use of polyols other than polyoxytetramethylene polyols, and it is noted that applicants have stated that the use of polypropylene ether glycols yields elastomers having deficient properties.

2. Claim 47 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how the ether glycol differs from the polytetramethyl glycol.

3. Claims 31 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 31 and 32 fail to further limit claim 30.

4. Claims 30-33, 36-39, 42, 43, and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Applicants' claims are confusing in that different terminology has been used throughout the claims for the polyoxytetramethylene polyol.

5. Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' amendment to claim 43 fails to clarify the issue pertaining to the NCO content, set forth within paragraph 3 of the previous Office action. It should be made clear that the content pertains to the prepolymer resulting from the reaction of diisocyanate and glycol.

6. Claims 44-47 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the production of golf ball covers using diethyl-2,4-toluenediamine and dimethylthio-2,4-toluenediamine, does not reasonably provide enablement for the production of golf balls using virtually any blend of differently reacting diamines. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Applicants have failed to provide adequate guidance for the selection and use of adequate blends of diamines having different reaction rates.

7. Claims 44-47 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had

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possession of the claimed invention. Adequate support has not been found for the language of claim 44 pertaining to the respective hindrances of the curing agents.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 30-33 and 36-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. ('852) or GB 2301291, each in view of Wu ('673) and Isaac ('568) and Presswood ('298).

The primary references disclose the production of thread wound-solid center golf balls wherein the winding and center are comprised of components which are equivalent to those

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claimed by applicants. See columns 2-5 and tables within Kato et al. See pages 7-9 and examples within GB 2301291.

10. While the primary references are largely silent regarding the use of polyurethane covers, the use of such covers utilizing applicants' claimed prepolymer and blends of curing agents having different reactivities was known at the time of invention. Wu discloses the use of prepolymers based on diisocyanates and polytetramethylene ether glycol and a slow reacting polyamine, such as 3, 5-dimethylthio toluene diamine. See column 2. Isaac discloses the production of golf balls having polyurethane covers, wherein the polymerization cycle is interrupted through the use of blends of curing agents having different reactivities, so as to permit a center to be introduced into a semi-cured golf ball cover half which is then mated with the other half and cured. See abstract and columns 2 and 3.

11. Though Isaac fails to disclose applicants' specific blend of fast and slow reacting diamines, the use of blends of diethyl toluene diamine with 3,5-dimethylthio toluene diamine to produce polyurethane molding compositions having controlled reaction profiles and improved properties was known at the time of invention. This position is supported by the teachings of Presswood at columns 2-4. Presswood further discloses the relative reactivities of the specified chain extenders.

12. Therefore, since it was known to employ blends of curing agents having different reactivities for the production of polyurethane golf ball covers and since it was known to employ diamines of the nature claimed by applicants to cure moldable prepolymers analogous to those

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claimed, it would have been obvious to one of ordinary skill in the art to utilize the curing agent blend of Presswood with the prepolymer of Wu in accordance with the teachings of Isaac, so as to obtain a golf ball cover composition suitable for use with the wound cores of the primary references.

13. The examiner has carefully considered applicants' arguments; however, the aforementioned position has been maintained. With respect to Kato et al. and GB 2301291, applicants have argued that the references teach away from the use of cores of the size claimed by applicants. In response, it is noted that Isaac discloses at column 3, lines 59+ that an advantage of using polyurethane covers is that the covers can be made thin and the cores can be made larger. In light of this teaching, it would have been obvious to produce cores of increased size, including sizes beyond those of the primary references. Furthermore, this argument is not commensurate in scope with all of the claims.

14. With respect to Wu, applicants argue that Wu disregarded the teaching of combining fast reacting diamines and used only a slow reacting diamine; therefore, applicant argues that one would not be motivated to utilize teachings which patentee disregarded. In light of the combined teachings of the references, the examiner finds little rationale for applicants' position. It is not agreed that the disregarding of a teaching within a reference removes that teaching from the consideration of patentability issues. Furthermore, Presswood and Isaac have been relied upon to provide teachings of the use of mixtures of hindered and unhindered diamines.

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15. With respect to the Isaac and Presswood references, despite applicants' arguments, the position is maintained that the references serve to teach the combined use of curatives having different reaction rates to yield molded polyurethane articles. Furthermore, it is unclear how Presswood could be considered to be non-analogous art, for the aforementioned reason that molded polyurethane articles are produced. The position is ultimately taken that applicants have failed to appreciate and adequately address the combined teachings of the references.

16. Lastly, the declaration, filed September 26, 2000, has been considered; however, the declaration fails to establish a nexus between the claimed features of the instant claims and the disclosed properties of the exemplified golf ball. Further, the declaration fails to clearly relate the differences between the instant golf ball and the comparative golf balls. Lastly, it is unclear to what extent the exemplified golf ball is commensurate in scope with the instant claims or to what extent the comparative golf balls are commensurate in scope with the relied upon prior art.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.


RABON SERGENT
PRIMARY EXAMINER